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2004 Annual Report

To the Governor, Legislature,
Office of Superintendent of Public Instruction
and
State Board of Education



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Introduction

After two years of intensive efforts, a comprehensive set of policies and systems supporting implementation of the Certificate of Academic Achievement was approved with passage of House Bill 2195 in 2004. Thanks to this achievement, the Legislature and the Governor have paved the way for completing the next essential steps in Washington's education reform journey.

Among the most important features of that support system are:

- authorization of up to four re-take opportunities for students not achieving the state standard (although the cost of re-takes is not clear and the re-takes have yet to be fully supported and funded);
- launching a process, subject to legislative approval, to develop alternative means of demonstrating mastery of state standards other than the Washington Assessment of Student Learning (WASL);
- creation of a system for some students served in special education, if they meet specific criteria still to be developed by OSPI, to graduate with a certificate of individual achievement if the WASL is not an appropriate measure for those individuals;
- placement of the student's grade 10 assessment scores on the high school transcript; and
- a host of other important policy provisions.

As part of the same legislation, the Commission was directed to review student performance standards and make adjustments deemed necessary. In addition, the Commission was directed to "include in its review consideration of various conjunctive and compensatory score models" for how students might earn a Certificate of Academic Achievement required for graduation beginning in 2008.

Since the Commission was directed by the Legislature in House Bill 2195 to consider various scoring models for the Certificate of Academic Achievement, the Commission has devoted the better part of the year to consideration of that issue and directly related issues. At every phase of Commission discussion, stakeholders were given the opportunity for input or additional comments responding to each issue as it arose.

In early spring the Commission approved recommendations for modest adjustments to the student performance standards for the WASL in reading, writing and mathematics. That and several other efforts undertaken as part of the review collectively inform and undergird the information provided in this report to the Legislature concerning the certificate.

The Commission contracted with Achieve, Inc., – a nonprofit organization focused on school reforms – for significant new research and analysis on the rigor of the WASL, its performance standards, and how WASL performance standards compare with exit test requirements in selected other states. The Commission also contracted with Management Analysis and Planning, Inc. (MAP), for research and analysis of what selected other

states have done to provide help to students who need additional assistance to meet exit test requirements. It is hoped that the value of this and other information provided to the Commission will go beyond informing Commission deliberations. The research efforts are intended to be useful to state policy makers and budget writers who will receive this report.

It is of overriding importance in our public school system to help students in the classes of 2008 and beyond successfully meet standards and embark upon their adult lives prepared to succeed. Student achievement in basic skills, as specified in the Essential Academic Learning Requirements, must accelerate dramatically.

The magnitude of the task before us, and the gravity of the stakes for young people, compel the Commission and should compel educational leaders and policy makers to concentrate all possible effort toward effective implementation of the Certificate of Academic Achievement, including intervention steps to help students become successful in achieving proficiency during re-takes. The certificate will imbue a high school diploma from Washington public schools with significance as never before and will equip our state's young people with the tools necessary to become life-long learners, to be productive employees, to lead satisfying lives, and to build a vibrant and dynamic future for our state.

PROGRESS

The Legislature directed the Commission to review student performance standards for the Washington Assessment of Student Learning (WASL) administered in grade 10. Even before this directive was finally approved in the spring of 2004, however, discussion of the idea was underway. The legislative debate in 2003 on House Bill 2195 and other considerations prompted the Commission to develop plans for the review of student performance standards on the WASL. In the fall of 2003, the Commission modified its 2003-04 workplan to provide for a review of the performance standards.

Cut Score Review

The Commission recognized the obvious importance of reviewing tenth grade performance standards because of the approaching graduation requirements. The Commission also asked for the review of the fourth and seventh grade WASL performance standards as well – since the standards are linked.

Review of Standards: the Process

The Office of Superintendent of Public Instruction (OSPI) proposed a process for review of the student performance standards to the Commission. In essence, the process mirrored the approach previously used to set standards, with some important differences.

The process for the review included two additional steps. First, the individuals convened to examine the standards *were informed of where the current standards are set*. This information was provided relatively early in the approximately three-day duration of the committee procedure. It was argued that the members on the review committee must not be denied the knowledge of where the current standard is placed. That information was provided after committee members had a look at the test items without the current standard identified, so that their perspective was not biased from the start by the judgments of the committees that set the original standard. Second, committee members received data showing student performance on items and tests so that panelists understood the impact of the decisions.

The process proposed by OSPI and reviewed and approved by the National Technical Advisory Committee was described to and approved by the Commission prior to implementation.

In February and March, OSPI recruited, appointed and coordinated work of nine separate committees that reviewed the reading, writing and mathematics standards of the three grade levels tested. (Concerning the diversity and backgrounds of the members of the standard setting committees, see the list of members in Appendix A.) Further, the

committee reviewed not only the standard representing “proficiency” but also the “cut scores” or performance standards that define “advanced” performance and “basic” performance.

Finally, in the case of the writing assessment, there was previously only one performance standard set – the “proficiency” standard. So although there were no existing standards for “basic” or “advanced” performance in writing, the committees also undertook to set the performance standards at those additional levels in writing.

The committees worked over several days to arrive at recommendations for performance standards. At the conclusion of that work, a separate group, called an Articulation Committee, reviewed the recommendations of all the separate standard setting committees. The Articulation Committee reviewed the entire process, particularly with an eye for how well expectations at different grade levels and across subject areas line up with one another.

On each assessment, three cut scores define four performance levels. Since the effort included three subjects and three grade levels, in total the review considered 27 cut scores. The review by the Articulation Committee resulted in a recommendation to alter the grade level/content areas committee recommendations for only two of the 27 cut scores involved.

The entire set of recommendations – from the standard setting committees and the Articulation Committee – was presented to the Commission.

Review of Standards: The Result

The committees recommended that many of the performance standards remain the same. In general, the changes that were recommended were quite modest in their magnitude. Some of the recommendations called for slightly lower cut scores to meet the standards. Some of the recommendations called for a slightly higher cut score.

Of the 27 cut scores involved in the review, changes were adopted or proposed for 12 cut scores, and no changes were made for 9 cut scores, while the remaining six standards were established for the first time (that is, for levels two and four in writing). Of those cut scores that were revised, the largest change was a five raw score point revision of the seventh grade basic cut score in math.

The seventh grade reading and mathematics WASL are the only cases in which significant adjustments were recommended in order to better align expectations of seventh grade achievement with those of both the fourth and tenth grades.

The Commission heard testimony from members of the standard setting committees, the Articulation Committee, the facilitators of the process, and a variety of stakeholder representatives.

The Commission approved the recommendations for student performance standards developed by the standard setting committees and the Articulation Committee. The tables below show the original cut scores and the approved changes to the cut scores.

Approved Adjustments in 2003 Cut Scores for WASL

GRADE 4	MATH cut scores (54 points possible)		READING cut scores (40 points possible)		WRITING cut scores (12 points possible)	
	Original Cut Score	Approved Cut Score	Original Cut Score	Approved Cut Score	Original Cut Score	Approved Cut Score
Level 4 <i>Advanced</i>	42	42	35	35	No score identified	11
Level 3 <i>Proficient</i>	34	33	28	27	9	9
Level 2 <i>Basic</i>	25	24	17	17	No score identified	7
Level 1 <i>Below basic</i>	24 or below	23 or below	16 or below	16 or below	No score identified	6 or below

GRADE 7	MATH cut scores (65 points possible)		READING cut scores (48 points possible)		WRITING cut scores (12 points possible)	
	Original Cut Score	Approved Cut Score	Original Cut Score	Approved Cut Score	Original Cut Score	Approved Cut Score
Level 4 <i>Advanced</i>	49	49	40	39	No score identified	11
Level 3 <i>Proficient</i>	41	38	34	32	9	9
Level 2 <i>Basic</i>	33	28	21	20	No score identified	7
Level 1 <i>Below basic</i>	32 or below	27 or below	20 or below	19 or below	No score identified	6 or below

The tables on the following page show the percentages of students who met proficiency standards on each test in 2003 based on the original cut scores, and the percentages of students who *would have met those standards in 2003* if the recently approved cut score adjustments had been in effect.

Grade 4

Subject	% meeting proficiency standard (original cut scores)	% meeting proficiency standard (cut scores approved in 2004)
Mathematics	56%	59.2%
Reading	67.8%	71.9%
Writing	54.8%	54.8%

Grade 7

Subject	% meeting proficiency standard (original cut scores)	% meeting proficiency standard (cut scores approved in 2004)
Mathematics	37.6%	44.9%
Reading	49.1%	57.6%
Writing	56.5%	56.5%

The Commission is authorized by statute to adopt performance standards on the fourth and seventh grade assessments. Therefore, the standards, as revised, were used to report student achievement on the 2004 WASL.

Adjustments to tenth grade student performance standards can be recommended by the Commission, but cannot go into effect without legislative review. The 2005 session provides the opportunity for legislative review. Unless the Legislature takes action to overturn the recommendations for tenth grade performance standards, the recommendations of the Commission will be implemented with the 2005 WASL. (See the recommendations section of this report for the adjustments the Commission is recommending on tenth grade WASL performance standards.)

Grade 5 Science Standard Setting

The Washington Assessment of Student Learning (WASL) for fifth grade science was administered statewide for the first time in 2004. Although still voluntary for school districts, in order to report results for students, schools and school districts, student performance standards must first be established.

Much the same process that was used for setting student performance standards last year on the grades 8 and 10 science tests was used again this year for the fifth grade assessment.

OSPI and the assessment contractor assembled a committee of Washington educators and community members with knowledge of both science concepts and developmental levels of fifth grade students, to review student performance characteristics, to examine the test itself, review student results item by item, and recommend how well students should score in order to be considered proficient. (Concerning the diversity and backgrounds of the members of the standard setting committee, see the list of members in Appendix A.)

Performance categories of “below basic,” “basic,” “proficient,” and “advanced” were defined by recommended cut scores.

The recommendations of the standard setting committee were presented to the Commission in August. Several members of the committee, other educators, and stakeholders testified to the Commission urging adoption of the recommended performance standards.

The Commission approved the recommendations of the standard setting committee, which enabled OSPI to report student results statewide for the first time in fifth grade science.

This action represents a milestone of a sort, completing the final statewide standardized assessment that must be developed under state law. Assessments for other subject areas, such as social studies, are to be developed by OSPI. Under provisions of federal law, there are to be standardized tests in reading and mathematics at additional grade levels that have not yet been implemented. However, all statewide standardized assessments that make up the Washington Assessment of Student Learning as outlined in state law are now complete.

Graduation Rate Goal Review Launched

In 2003 the Commission adopted performance improvement goals for high schools and school districts providing high school education programs. High school graduation targets are necessary. Federal provisions require such rates be used as an indicator for determining whether school districts and high schools have made adequate yearly progress (AYP). The target rates adopted by the Commission in 2003 called for schools and districts to meet the statewide average graduation rate for the class of 2002 or, if the school or district’s own graduation rate was below the statewide average, the school or district’s target would be to improve their own rate by one percentage point per year until reaching the statewide average.

The target for all schools and districts is an 85 percent on-time graduation rate for the class of 2014. The goal for 2014 applies not only to the students in the school (or district) as a whole, but also for groups of students such as students in Title I programs, students by major racial/ethnic group, and students in special programs.

The rule adopted by the Commission in 2003 (3-20-300 WAC) also provided for a review of the goals in 2004 when additional data would be available on graduation rates for the class of 2003.

Additional data was presented to the Commission, indicating that OSPI estimates the statewide on-time graduation rate as defined by the No Child Left Behind Act for the class of 2003 at approximately 66 percent.

By statute, the Commission must place any performance improvement goals in rule (necessitating use of Administrative Procedures Act processes). There is an additional requirement in statute requiring that the Commission present any such goals to the Legislature for its review and comment in a timeframe that would permit the Legislature to take statutory action, should it deem such action warranted, before the goals are adopted and implemented.

As the Commission considers possible revisions, two issues will provide the main focus. First, the graduation rate for the class of 2002 was assumed to be approximately 73 percent at the time of adoption of the goals, while the latest estimate found the rate to be approximately 66 percent. In light of this lower than initially expected starting point for the goals, the Commission will consider whether more rapid progress than envisioned in the current goal structure, and specifically a series of interim goals, is needed. Second, the Commission expects to consider whether goals before 2014 ought to apply to disaggregated groups, rather than just the overall student population (the goals for 2014 are the earliest goals under the current rule that apply to disaggregated student groups).

At the time this report was written, the Commission had initiated the rule making process in order to preserve the option of revising the goals. However, it has not yet completed the development of the proposed new goals. If the Commission does proceed with a revision to the graduation rate goals, it will advise the Legislature in a timely manner what changes are being considered.

FINDINGS

It was previously noted in this report that the Legislature, in HB 2195, directed the Commission to consider a variety of scoring models for the Certificate of Academic Achievement. As part of that consideration of various scoring models, the Commission has sought to understand how difficult the tenth grade assessment is for students. The question of the rigor of the WASL bears directly upon the issue of the balance between high standards and expectations that are reasonably attainable.

Rigor of WASL 10

How rigorous is the WASL? The question is more difficult to answer than it might seem to be at first glance. There are a number of possible approaches to try to answer this question, each with some strengths and shortcomings.

Gauging Test Rigor by Grade Level Curriculum Rigor

One approach to describing the rigor of a test is to describe the subject matter content of the test and identify the grade level in which that same content is taught in educational systems acknowledged for their rigor and high levels of achievement.

Achieve, Inc. Study

This is the approach taken in a first-of-its-kind study by Achieve, Inc., published in June. The Achieve study focused on the exit tests of six states; among the six states [Florida, Maryland, Massachusetts, New Jersey, Ohio and Texas], a variety of grade levels are tested and a varying number of re-takes are offered. Upon release of that study, *Do Graduation Tests Measure Up*, the Commission and OSPI saw an opportunity to significantly enrich understanding of the rigor of the WASL. Achieve, Inc. was contracted* to:

- analyze each test item on the tenth grade reading, writing, and mathematics WASL for 2003;
- define the domains of knowledge and skill tested on the WASL;
- analyze the cognitive demand of the WASL test items;
- compare each of these indicators of rigor with the levels of rigor found on the other six state exit tests already analyzed by Achieve; and
- compare the rigor of WASL performance standards with exit test cut scores on the other six states' exit tests.

* Partnership for Learning, Washington Mutual and The Boeing Company provided generous support for this project.

The full report will be available at the end of the year. A summary of findings in the preliminary report was offered to the Commission in October (and is available by contacting the Commission office or visiting the Commission's website at www.k12.wa.us/accountability).

The preliminary report by Achieve concludes that the 2003 WASL is "a well-designed assessment." They further conclude:

- "Compared with the other states, the writing test is exemplary."
- "The reading test is relatively strong as well."
- "The math test is the least challenging of the three when compared to the other states, most notably because the content is less rigorous." [pg. 23]

The findings also include the following:

- "The 2003 [reading] WASL places more emphasis on more advanced content than other states [pg. 4] ... [T]he 2003 WASL places significant emphasis on interpreting informational text ... No other state of the seven examined in this study emphasizes these materials on their exams to the extent that Washington does." [pg. 5]
- "[T]he level of demand on the six [reading] tests most closely resembled that of the ACT 8th and 9th grade EXPLORE test ... [T]he 2003 [reading] WASL looks very similar to the other state tests ..." [pg. 6]
- "The difficulty of a reading test is determined not only by the complexity of the reading passages -- but also by the cognitive demand of the questions about those passages ... Based on this scale [Reading Rigor Index scale developed by Achieve], the 2003 WASL appears to be somewhat less rigorous than most of the other tests, largely because the reading passages are not as challenging." [pg. 9]
- "Washington's approach to assessing writing on the 2003 WASL is as sophisticated as the best of the other states Achieve studied. ... Washington also sets itself apart from the other states by requiring students to pass the writing assessment in order to graduate." [pg. 10]
- The 2003 math WASL "emphasizes number and data over algebra and geometry" [pg. 11] and "Pre-Algebra [is] emphasized over more advanced Algebra." [pg. 12]
- "[T]he average IGP [International Grade Placement] value for the 2003 [math] WASL is lower than those for the 6 state test previously examined [pg. 14] ... suggesting that this test is less challenging to pass in terms of its content difficulty than the six other states' tests analyzed. ... [T]o pass the 2003 [math] WASL, students are required to know content that is taught, on average, in the late 6th grade or early 7th grade internationally." [pg. 20]

- "In our judgment, there are two additional factors that may be contributing to low student performance [in math]: 1) a lack of motivation, as the test does not yet count for students; and 2) the format of the test questions, which may be presenting greater challenges to students than we would expect." [pg. 21]
- "Even though in the case of the WASL the mathematical content of the items may not be as advanced as that on other state tests, the format of the questions may be challenging for students because there are not a set of answers to choose from." [pg. 22]

Rigor Viewed through Student Results

Another approach to describing the rigor of the assessment is to simply determine the proportion of students who exceed a certain cut score. This approach has the advantage of being very easy to calculate, track, and report. It is also the approach used in determining difficulty level as the concept of 'difficulty' is operationalized in the bookmark method of standard setting that has been used on the WASL. Test items are placed in *order of difficulty* as determined by the percentage of students who earned each point on a WASL item.

On the other hand, relying solely on current student performance may not give us a full picture of the *inherent* difficulty of the assessment, since the students' performance might have less to do with the difficulty of the test items than with curriculum alignment, teaching quality, time on task, the absence of consequences to the student for their performance on the assessment, and factors of that kind that do not relate to the fundamental cognitive demand of a certain concept or skill.

Looking at student results tells us that about 39 percent of tenth graders in 2004 met standard in all three subjects for the certificate. For subgroups of students, the 2004 results show that 44 percent of White, 16 percent of Hispanic, 14 percent of African-American, 47 percent of Asian/Pacific Islander, 20 percent of Native American, 5 percent of English language learner, 4 percent of special education and 23 percent of Title I students were proficient in three subjects. But these "pass rates," while lower than initial pass rates observed in other states with an exit test, are not the only way to determine how challenging the assessment is for a hard working, well taught student.

Comparative Rigor: State Tests Compared through Common Test

Another way to describe the rigor of the WASL is to compare it with other assessments and see which tests appear to be relatively more and less rigorous.

This is the approach taken in an analysis conducted by The Princeton Review in *Testing the Testers, 2003*. This analysis sought to compare states' criterion-referenced tests with one another. The methodology for comparing performance on different tests was to see

how each individual state test result compared with a single common test administered in each state, the National Assessment of Education Progress (NAEP).

When students take the TAAS test used in Texas and appear to perform much better on it than Texas students performed on the NAEP, we can see the rigor of the TAAS compared to the NAEP. When this is done for each state, the resulting distance between the student performance on one state's test and the NAEP can be compared with the distance between a different state's test and that state's NAEP results. Thus any state can be compared to any other state, since the NAEP was administered in every state in 2002.

This analysis by The Princeton Review found that Washington's assessment was among the more rigorous assessments of the 50 states. Four states had more rigorous tests, and four states had a test of equal rigor to the WASL, in this analysis. However, limitations to this analysis are important to keep in mind as well. Most importantly, the analysis used eighth grade NAEP and seventh grade WASL mathematics assessments, not the high school assessment that is relevant to the certificate.

In addition, students might not be as motivated to do their best on the NAEP in comparison with the state test, since the state test might have carried some consequences for the student that were not also attached to the NAEP. Finally, we cannot assume that any one assessment of only one subject at one grade level is necessarily representative of the level of rigor of each subject and each grade level tested in an entire state assessment program. For example, the WASL includes four subjects, and three grade levels -- it is composed of 12 tests, not a single test. And the seventh grade math WASL may not have exactly the same level of rigor as every other WASL test.

Rigor of the WASL: Summary

With so many ways to look at such a complicated question as the level of rigor in the tenth grade WASL, definitive conclusions are elusive. It appears as though the WASL is rigorous when viewed in certain ways, and appears much less rigorous when viewed in other ways. Given that the diversity of opinion concerning the level of rigor of the WASL stems from differing ways of looking at or analyzing the content and performance standards on the assessment, the Commission has a high level of confidence in the fact that local educators from Washington state developed the WASL test items specifically to reflect the locally developed state content standards, the Essential Academic Learning Requirements.

Opportunity to Learn: Remediation Study

With so many students not scoring at the proficient level in one or more subjects on the WASL, the Commission sponsored a study of intervention practices in other states that have already implemented exit test requirements. The report, *Examining Washington's Opportunities to Learn: Exit Exam*, was conducted by Management, Analysis and Planning, Inc., of Davis, California, an education policy, fiscal and program evaluation research firm.

They reviewed research literature on effective intervention programs, described approaches to remediation undertaken in the context of a state exit test in a sample of other states, and analyzed the potential cost in Washington of taking similar approaches to remediation for high school students not yet meeting standards on the WASL.

Major findings of the study include the following:

- "Washington has done well to provide the funding opportunities, through state and federal funds, to allow schools and school districts to pursue the OTL [Opportunity to Learn] strategies of their choice. However, it is not entirely clear how effective those funding programs have been to date. Few, if any, program evaluations have been conducted ..." [pg. 2]
- "The lack of solid, definitive research supporting any given OTL [Opportunity to Learn] strategy at the secondary level, either Washington-funded initiatives or those funded in other states and school districts is disconcerting." [pg. 23]
- "[S]tate policymakers should take inventory of all of the state's existing programs, determine their effectiveness in reaching their desired goals, and move quickly to eliminate those programs that are least effective." [pg. 2]
- "[R]ather than fund entirely new, large-scale programs to assist secondary schools, a more prudent strategy would be to take existing resources and experiment with innovative pilot programs across the state ... As pilot programs are continually evaluated, the state can then explore how to bring those programs to scale. These pilot programs should be targeted to those schools with the lowest performance." [pg. 2]
- "What becomes more difficult for state and local policymakers in choosing OTL [Opportunity to Learn] strategies is the lack of generalizable evidence of the effectiveness of academic interventions at the secondary level. Most documented initiatives have taken the early-intervention approach, serving elementary schools and, to a lesser extent, middle schools ... [T]he ability to generalize those effects to secondary schools remains speculative." [pg. 2]
- "Other states and schools have explored different OTL [Opportunity to Learn] strategies at the secondary level. Evaluations of these state-level initiatives are

still underway to determine their effects on student performance ... However, Washington policymakers can be guided in their decisions to provide opportunities to learn to their secondary school students by the efforts of policymakers in other locales." [pg. 2]

The full study is available by contacting the Commission office or through the Commission's website.

Motivation, Re-Takes Gains in Other States

Experience in other states consistently demonstrates that students who actually face a graduation requirement perform better on an assessment than students in previous cohorts who took the test without that motivational factor present.

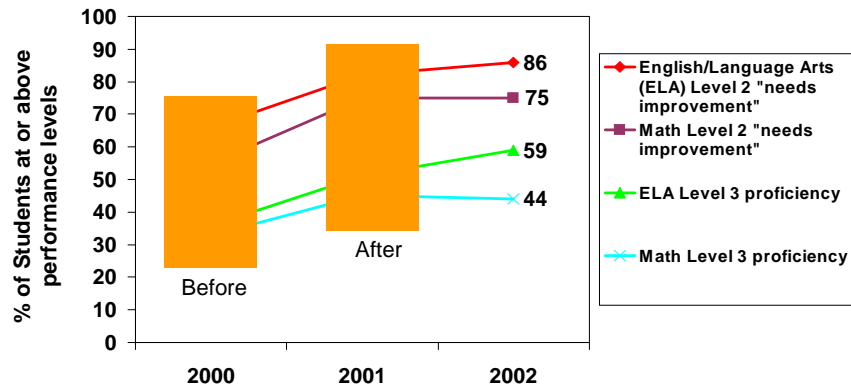
The Commission analyzed test scores from a number of states with experience in giving a test to students who did not face a graduation requirement and then giving the same test to subsequent groups of students who did have to pass the test to graduate. The picture of student achievement before – and after – the application of the test score graduation requirement presents a striking contrast. The state with the single most instructive collection of data is Massachusetts.

Massachusetts is similar to Washington in several important respects, including the type of assessment used for the graduation requirement. (Previous annual reports of the Commission and Commission presentations to legislative committees have described numerous points of relevant similarity between Washington and Massachusetts. The American Diploma Project also issued a recent report describing in considerable detail the very close similarities of these two states, in the context of state education reform.) In Massachusetts, the percentage of students scoring above the graduation requirement level (level 2 out of four levels) jumped from 51 percent to 68 percent when the first group of students faced with the requirement took the 10th grade test. The percentage of students reaching proficiency (level 3 – not the graduation requirement level) jumped from 31 percent to 42 percent.

Other states examined also had increases, though smaller ones. Indiana's pass rate jumped from 54 percent to 61 percent. South Carolina's rose from 66 percent to 71 percent. New Jersey's increase was from 74 percent to 76 percent.

Taking a closer look at Massachusetts, the data indicate even greater improvements in some areas. The following chart shows the before-and-after data in their schedule for implementing the exit requirement. The two separate subject matter tests are shown, as well as two different performance levels. The most dramatic finding is the 20-percentage point jump in mathematics at the level 2 ("needs improvement") cut score – which is the standard required for graduation in Massachusetts.

10th Grade Student Performance Before and After Graduation Requirement

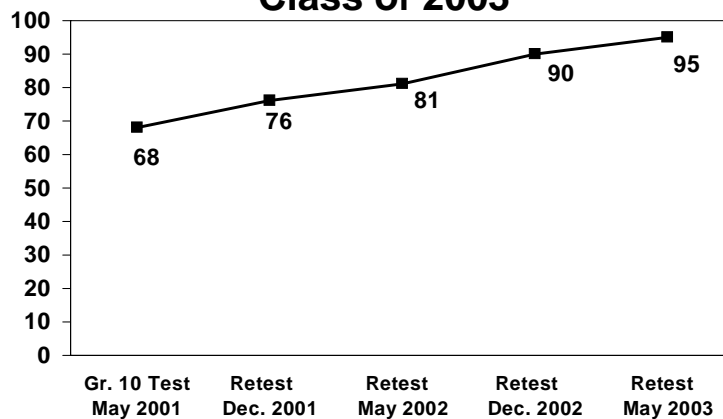


Source: Massachusetts Department of Education

The state of Massachusetts and the local school districts provided significant assistance to students to help them clear the bar for the exit test. The interventions and re-take opportunities boosted cumulative pass rates as seen in the following chart, according to figures from the Massachusetts Department of Education.

Cumulative Percentage of Students Meeting the High School Graduation Standard (Level 2)

Class of 2003



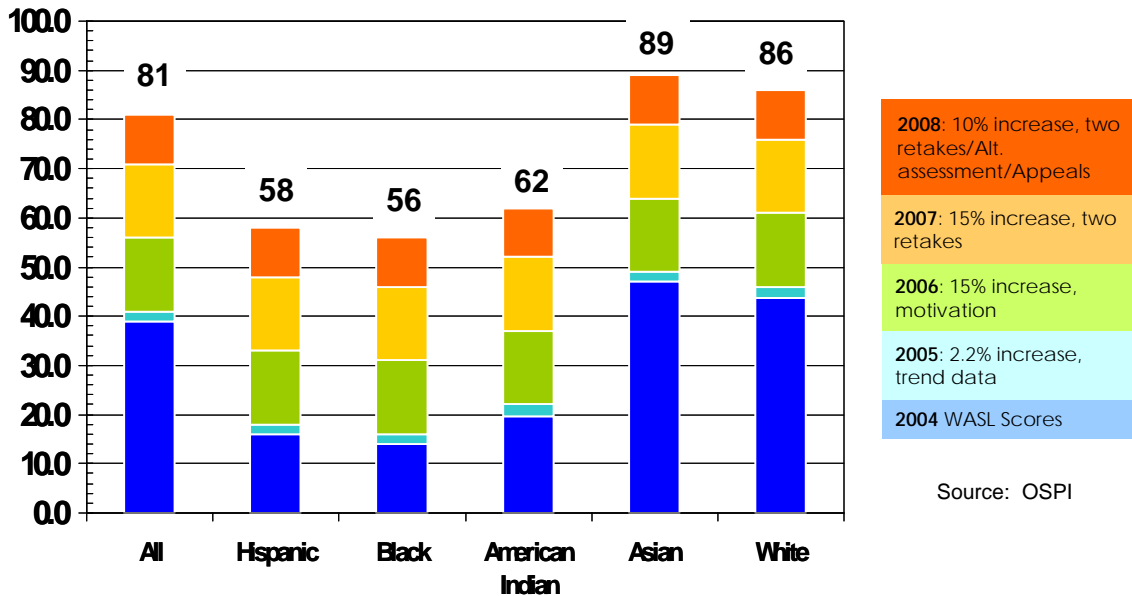
Source: Massachusetts Department of Education

It is important to note these data are the focus of some controversy. Some observers have criticized the method the Massachusetts Department of Education used in calculating the cumulative pass rates. The cumulative pass rates reported for re-takes do not include students who dropped out after taking the test as tenth graders. Thus, the final cumulative pass rate of 95 percent is a calculation that includes only those students still enrolled at the end of the senior year. However, Massachusetts reported that the dropout rates did not change after the implementation of the graduation standard.

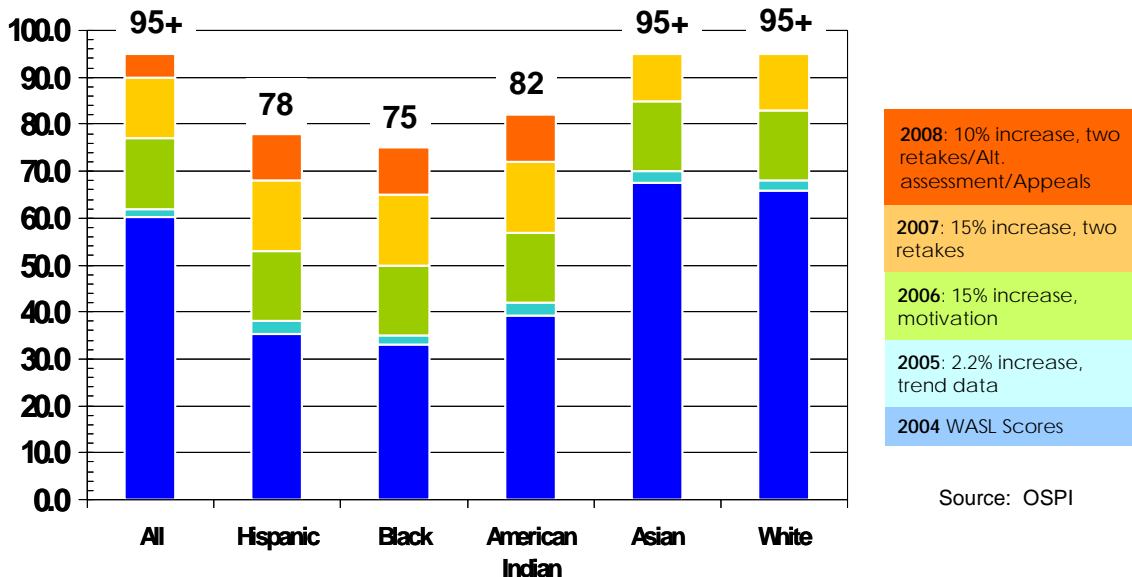
It is important to emphasize that although Washington has provided retake opportunities, this state, unlike Massachusetts, has not yet provided significant state funding for intervention opportunities for students.

The following charts display OSPI-projected cumulative pass rates for the class of 2008 under four of the Certificate of Academic Achievement scoring models. (Numerous scoring models were initially identified; in the spring, the Commission winnowed down to four the number of models under consideration. The four models that were the focus of deliberations over the summer and fall are the ones depicted in these graphs.)

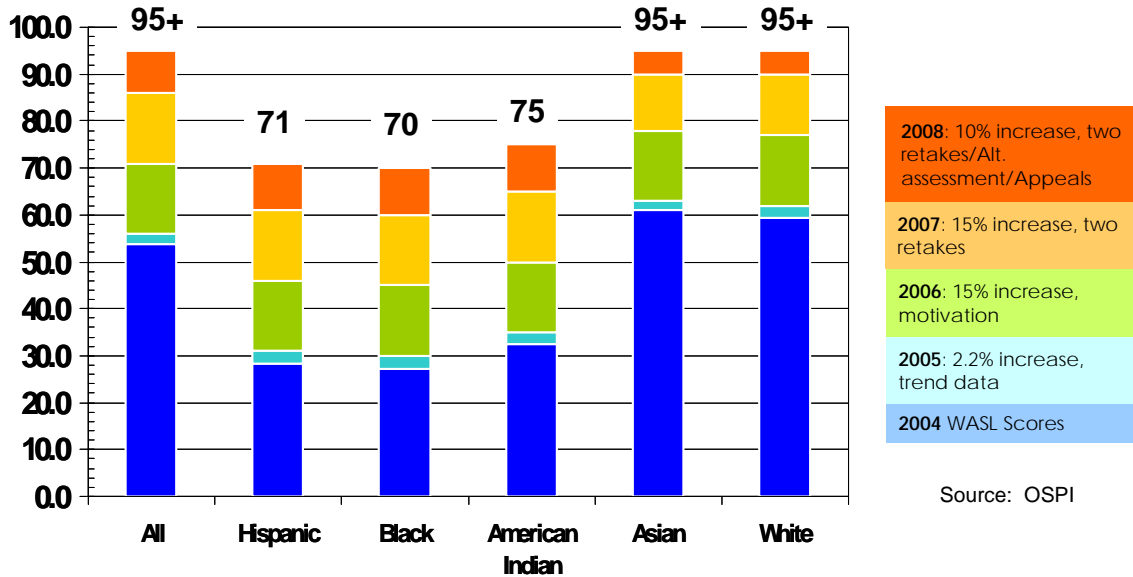
Model 1 – 3 Proficient OSPI-Projected Cumulative Pass Rates Class of 2008



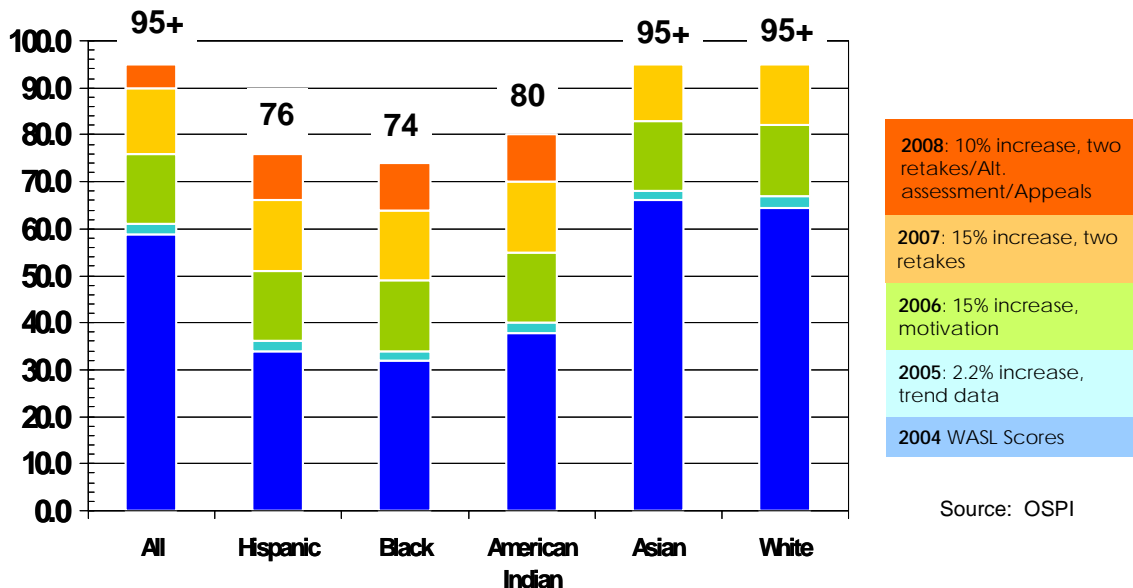
Model 3 – 3 Basic OSPI-Projected Cumulative Pass Rates Class of 2008



Model 9 – 2 Proficient, 1 Basic OSPI-Projected Cumulative Pass Rates Class of 2008



Model 10 – 1 Proficient, 2 Basic OSPI-Projected Cumulative Pass Rates Class of 2008

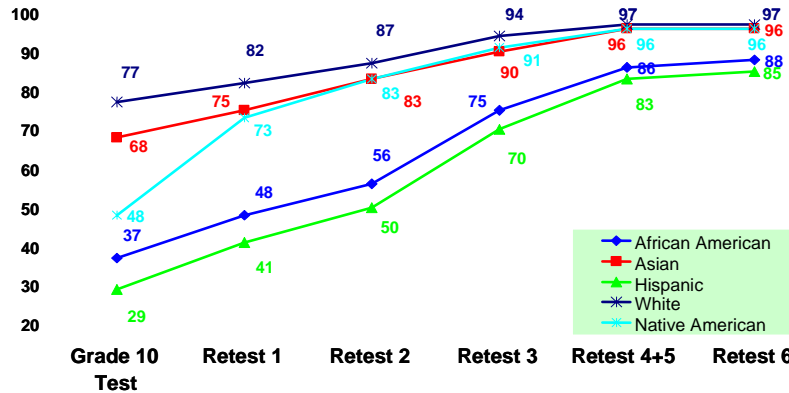


Achievement Gains, Achievement Gap Reductions in Massachusetts

The Commission finds promising evidence that exit test policies may have had a positive impact in reducing the achievement gap between white students and students of color. Again the richest single source of data comes from Massachusetts. The state has provided substantial resources for focused assistance for students. Since African-American, Hispanic, and Native American students had far lower initial pass rates on the exit test, those students are more likely to be the recipients of improved instruction.

The experience of students in Massachusetts' class of 2003, the first group of students required to reach a certain score on the state assessment in order to be eligible to graduate, is depicted in the following chart. According to these data, upon first taking the test as tenth graders, there was a difference of 48 percentage points between the proportion of white students reaching the required level and the proportion of Hispanic students (the lowest scoring group) reaching the required level. The 48 percentage point achievement gap at the end of the tenth grade was reduced to just 12 percentage points by the last re-take opportunity at the end of the twelfth grade.

**Massachusetts – Class of 2003
Students Attaining Level 2 Competency by Ethnicity**



Source: Massachusetts Department of Education

As was stated above, these data must be interpreted cautiously, since by the Massachusetts Department of Education's own admission, students who dropped out after taking the test as tenth graders are not included in the cumulative pass rate calculations. If general trends in dropout data held true in Massachusetts during this period of time, it is likely that disproportionately more Hispanic than white students dropped out during that time, which would have the effect of artificially overstating the reduction in the achievement gap.

Boston College senior research associate Anne Wheelock has compared the number of Massachusetts students enrolled in October of their 9th grade years with the number of students enrolled at the end of their 12th grade years four years later, to re-calculate cumulative MCAS pass rates. Wheelock reports that according to this methodology, the pass rates in Massachusetts for the class of 2004 are 80 percent for white students, not the 98 percent rate reported by the Massachusetts Department of Education; 59 percent of African-Americans passed, rather than the 88 percent reported by the Department; 54 percent of Latino students passed, rather than the 85 percent reported; and 89 percent of Asian students passed, rather than the 95 percent reported pass rate. (*“Massachusetts Department of Education “progress report” inflates MCAS “pass rates” for the Class of 2004”* June 8, 2004, www.massparents.org)

In spite of this controversy over the dropout data and cumulative pass rates, it bears repeating that the Massachusetts Department of Education reported that dropout rates did not change after the implementation of the graduation standard. There is evidence of improvement among all student ethnic groups with the greatest improvement occurring among the initially lowest achieving populations – Hispanic, African-American and Native American students.

Public Input, Public Opinion

The Commission endeavored to gather the views, concerns and suggestions of educators, members of the community, and all concerned Washingtonians over the past year in regard to the consideration of Certificate of Academic Achievement scoring models. The types of efforts undertaken to provide the public with opportunities to share comments include the following:

- Public testimony at no fewer than nine public meetings of the Commission;
- Request for comments sent to the Commission's entire database mailing list;
- OSPI-developed and -promoted among school districts on-line survey;
- Written survey forms distributed at State PTA convention, Spokane Public Schools' Diversity Advisory Council Annual Equity Awards Celebration, Spokane Tribe's Encampment Pow Wow;
- Presentations offered at conferences and meetings of stakeholder groups for central office administrators, school board members, principals, parents and others, with requests for feedback;
- Presentation and discussion with principals' association leadership board;
- OSPI's Multi-Ethnic Think Tank groups and members invited to share input;
- On-line survey provided to all persons and groups on the Commission's mailing list (results discussed below);
- Electronic survey provided to approximately 4,000 people statewide who serve in a leadership capacity within the PTA;
- Presentation, discussion and survey forms collected at break-out session at annual conference of the Washington Association of School Administrators;

- Discussion with several Tribal leaders from around the state of Washington hosted by the Tulalip Tribe in October; and
- In October, the Commission, on a tentative basis, winnowed the number of options to two and stopped short of a final decision, in order to provide the public with another month to convey input before the Commission would attempt to approve a final recommendation at its November meeting.

The on-line survey mentioned above was designed to closely parallel the questionnaire used in the random sample public opinion survey described later in this report. The two different methodologies – one a scientifically random sample, the other a self-selected sample of those with enough information, interest and initiative to have participated in the on-line survey – are complementary sources of information. Using an on-line survey service called Zoomerang, the Commission sent an e-mail to its entire database of individuals and organizations with a request to fill out the survey, and also invited various educational organizations and associations to encourage their members to complete the survey. The Commission received nearly 2,100 responses. While highlights of the survey results are presented here, the full set of results are available by calling the Commission office or visiting the Commission's website.

The survey contained questions directly related to passing the tenth grade WASL as a requirement to earn a Certificate of Academic Achievement. Four models were presented: Proficient (Level 3) in all three subjects; Basic (Level 2) in all three subjects; Proficient in two subjects and Basic in one subject; and Proficient in one subject and Basic in two subjects. Percentages of responses were:

Proficient in all three	21 percent
Basic in all three	30 percent
Proficient in two and Basic in one	23 percent
Proficient in one and Basic in two	12 percent
Not Sure/Undecided	14 percent

When impact data using the 2004 tenth grade WASL results were shared in the next question, the percentage of people favoring Proficient in all three dropped to 18 percent and the percentage preferring Basic in all three rose to 39 percent. Percentages for the other models remained effectively the same. When people were informed that in other states with exit exams the cumulative pass rates increased significantly from the initial assessment to the end of the senior year, the percentages reverted to approximately the initial result on Certificate of Academic Achievement model preference.

Responses were almost evenly split between those with (51 percent) and those without (49 percent) school-aged children in the home. Thirty percent of respondents without children in school approved of the certificate requirement for graduation. The percentage of respondents with school-aged children who agreed with the certificate requirement was 6 percentage points lower (24 percent).

Respondents were asked about their affiliation to schools and school districts. The table below shows, for the five largest categories of respondents (number of respondents in parentheses), levels of support for the WASL-based certificate requirement for graduation.

Tenth Grade WASL as a CAA Requirement			
Respondent Affiliation	Support	Oppose	Unsure
Teacher (880)	21%	70%	9%
Not Employed by School or District (317)	24%	66%	10%
District Administrator (157)	52%	43%	5%
School Counselor (142)	18%	72%	10%
Principal or Vice Principal (139)	52%	42%	6%

Respondents to the on-line survey were 83 percent White, 4 percent African-American, 3 percent Hispanic, 3 percent Asian/Pacific Islander, 2 percent Native American, and 5 percent multi-racial or other.

The Washington State PTA provided a streamlined version of the Commission's on-line survey to the PTA's approximately 4,000-member leadership group. Among the 1,160 PTA leaders who responded to that on-line survey, 28 percent agreed with the certificate graduation requirement and 58 percent disagreed. When asked about scoring models, 19 percent favored a certificate requirement of Proficient in all three subjects, 29 percent favored a certificate requirement of Basic in all three subjects, 35 percent favored a combination of scores at the Proficiency and the Basic levels, and 18 percent didn't know.

The sort of proactive efforts described above generally involve reaching out to audiences known to be interested in and somewhat informed about education reform policy. Some of these efforts are particularly valuable because they give residents who care a great deal about these issues the opportunity to provide input for consideration by policymakers. However, the segment of the population that is interested enough to participate and has sufficient access to the policy process to do so may not be representative of the state population as a whole.

High school graduation standards and the meaning of a high school diploma are of sufficient importance that all residents have a stake in decisions about the certificate requirement. All residents of the state have a stake in how well-prepared students are when they finish high school, yet many do not take proactive steps to make sure their voices are heard in policy deliberations. The Commission determined the only scientifically valid method for gathering public input would be through a random sample survey, so a public opinion poll was conducted for the Commission under contract with Hebert Research, Inc., of Bellevue.

The full report containing all the opinion poll findings is available by contacting the Commission office or by visiting the Commission's website. Selected highlights of the poll's findings include the following:

- Opinion poll respondents were asked to rate on a scale of 0 to 10 their level of support for the requirement to earn a Certificate of Academic Achievement in order to graduate, knowing that up to four retake opportunities will be available and that there would be an alternative means of demonstrating achievement. Forty-four percent reported a high level of support (8-10 on the 0-10 scale), while 19 percent reported a low level of support (0-3) for the requirement. (pg. 15)
- After being told the 2004 pass rates on the WASL, poll respondents were asked which option for the certificate they support. Forty-seven percent favored a model that combined some level 2 and level 3 scores, while 22 percent favored requiring Proficiency in each subject and 20 percent favored requiring Basic scores in each subject. Six percent said none of the above, and 4 percent were not sure. (pg. 17)
- Poll respondents were told of the requirement under current law to achieve proficient scores in each subject to earn the diploma starting in 2008. They were then asked whether they would favor increasing the graduation requirement back to Proficiency in all subjects at a future date if the initial requirement permitted one or more scores at the Basic level. Fifty-seven percent favored boosting the requirement back to the Proficiency level in the future if it is lower initially, while 29 percent were opposed to reinstating a requirement for Proficiency in each subject, and 15 percent didn't know or refused to answer. (pg. 23)
- The opinion poll asked respondents to rate on a scale of 0 to 10 their level of agreement or disagreement with a statement that the state and local school districts will have to provide additional resources to help students meet WASL standards. Fifty-seven percent strongly agreed (ratings 8-10) and 14 percent strongly disagreed (ratings 0-3) with the statement. (pg. 28)

The respondents to the public opinion poll were 88 percent White, 5 percent African-American, 2 percent Asian/Pacific Islander, 1 percent Hispanic and 1 percent Native American and 1 percent other.

Certificate Models Considered

The National Technical Advisory Committee to the OSPI identified numerous potential scoring models for awarding the Certificate of Academic Achievement. (See Appendix B for a graphic display of most of the models identified for consideration.) By early in 2004 when the Commission was initially presented with a range of models, nine options were described. Over the course of the ensuing months, additional models were identified and analyzed. The models included variations on a number of factors, including the standard error of measurement and various ways of allowing scores in some subjects to compensate for scores in other subjects. Other models were based on the notion of selecting different cut scores already established on the WASL, and even setting a new cut score for the specific and sole purpose of the certificate requirement.

In March and April the Commission began winnowing the number of models under consideration, and by May the options had been narrowed to four.

The four options that received primary consideration over the summer and fall represented a continuum of scores at the Proficient and the Basic levels. At one end, the model represented by current law envisions Proficient scores in every subject. At the other end of the spectrum, the Commission considered initially allowing Basic scores in each subject (for a limited time). The two models in between were the other two possible combinations of Proficient and Basic scores.

By October the Commission narrowed the number of options to two and developed a schedule for increasing the certificate requirements over time. As part of the October deliberations, the Commission also described a number of additional expectations that the Commission believes must also be addressed alongside implementation of the certificate requirements. The Commission had planned to make a final selection of a recommended scoring model at its meeting in November.

In those November discussions, members of the Commission agreed that the ultimate objective of the state's standards-based assessment and accountability system should remain an environment in which all students are expected and able to demonstrate Proficiency in all subjects. The Commission's deliberations were focused on what actions should be taken today in order to maximize the potential for reaching that ultimate objective as quickly as possible. On this question, the Commission members demonstrated a diversity of strongly held opinions, not unlike the diversity of opinion held by various educational stakeholders and the general public. As a result, the Commission was unable to reach a consensus or a majority position in favor of any single scoring model. Therefore, the Commission does not offer any recommendations for changing the scoring model for the Certificate of Academic Achievement.

RECOMMENDATIONS

Grade 10 Cut Score Adjustment Recommendations

The Commission recommends that the Legislature accept the revisions to student performance standards as identified in the table below. The table outlines all the cut scores that were in place in 2003, the recommended adjustments, and the proposed new cut scores defining, for the first time, levels two and four – basic and advanced performance – in writing. (No legislative action is necessary in order to accept these revised standards. OSPI can implement the cut score revisions with the 2005 WASL provided the revised standards are not overturned by legislative action.) All tenth grade writing papers are now double-scored. Therefore, there is a new total of 24 points possible, as opposed to the tables for fourth and seventh grade above.

Proposed Grade 10 Adjustments in 2003 Cut Scores for 2005 WASL

GRADE 10	MATH cut scores (64 points possible)		READING cut scores (52 points possible)		WRITING cut scores (24 points possible)	
	Current	Proposed	Current	Proposed	Current	Proposed
Level 4 <i>Advanced</i>	48	50	37	39	No score identified	21
Level 3 <i>Proficient</i>	39	39	32	31	17	17
Level 2 <i>Basic</i>	29	28	22	22	No score identified	13
Level 1 <i>Below basic</i>	28 or below	27 or below	21 or below	21 or below	No score identified	12 or below

The table on the next page shows the percentage of students who met Proficiency standards on each test in 2003 based on existing cut scores, and the percentage of students who **would have met those standards in 2003** using the proposed cut score adjustments. These data present the averages for the overall student population and also convey the significant variation in these percentages found among disaggregated subgroups of students.

Percentages of Tested Students* in 2003 at or above Current and Proposed Level 3 Cut Scores

10 th Grade <i>Proficient</i>	Math		Reading		Writing	
	Current	Proposed	Current	Proposed	Current	Proposed
All	42.5%	same	64.9%	67.8%	66.5%	same
American Indian / Alaskan Native	26.2%	same	50.3%	53.0%	50.5%	same
Asian / Pacific Islander	48.9%	same	67.5%	70.3%	70.3%	same
Black / African American	15.9%	same	42.2%	45.4%	46.4%	same
Hispanic	18.1%	same	38.8%	41.9%	39.6%	same
White	47.0%	same	69.8%	72.6%	71.1%	same
Title I	27.5%	same	48.9%	52.0%	51.8%	same
English Language Learners	8.7%	same	12.6%	14.2%	12.1%	same
Special Education	4.7%	same	14.2%	16.3%	14.7%	same

* Ten to 13 percent of all students are not included in these passing percentages because they were in one of eight categories such as absent, refused, no longer enrolled, and exempt.

Standards for Certificate of Academic Achievement

At the behest of a legislative mandate to consider a variety of scoring models, the Commission has carefully considered no less than a dozen approaches to setting the bar for what students will have to achieve to earn a certificate. This work has taken a great deal of the Commission's energies, discretionary funds, and concentration throughout the year.

After a great deal of research, reflection, public outreach and searching deliberations, the Commission was unable to develop a consensus or even a majority position in support of a single scoring model for the Certificate of Academic Achievement.

The Commission found the task of considering these various scoring models and selecting one preferred model to be a very difficult one. The task necessarily requires balancing competing principles. On the one hand, what students will need to achieve to be prepared for a successful future must rank as the foremost concern. On the other hand, the degree to which today's system of public education in Washington has the capacity to give our students every reasonable opportunity to reach the desired level of achievement must be weighed as a relevant and constraining factor. The standard must be challenging in order to be relevant to the increasingly complex directions in which our economy and our society are developing. Yet the standard, in order to be fair to students and their families, must also be attainable in view of the practical realities present in our education system today.

At the conclusion of the Commission's deliberations, some members believed strongly that the Proficiency standard in all subjects ought to remain the expectation for earning the certificate. Other members believed that while the Proficiency goal is desirable, the education system is not yet prepared to support that level of student achievement, at least for some groups of students, and therefore favored a lower initial standard with a specified additional time period to phase in the Proficiency standard. Some Commission members recommended that this initial standard be set at the Basic level in all subjects, while others preferred a middle ground combining both Proficient and Basic levels. However, with no option gaining support from a majority of the members, no recommendation on this issue can be offered at this time.

Regardless of the certificate model preferred, all Commission members felt strongly that successful implementation of the graduation requirement would require focus on the following issues:

- Utilization of student performance data to proactively improve instruction;
- Development of alternative means of assessment and/or an appeals process;
- Funding for acceleration support to help all students meet standards;
- Identified support for target populations such as special education students and English language learners;
- A system to improve graduation rates within the state; and
- Expanded program of focused assistance for struggling schools.

The Commission pledges its fullest support and assistance to the Legislature and the Governor as they continue to work toward implementation of high school graduation expectations.

Appendix A

Membership and Composition of Standard Setting Committees

Standard Setting Committee -- 10th Grade Mathematics					
	NAME	GENDER	ETHNICITY	GROUP	SUBJECT
1	Barbara Casey	f	African American	teacher	Math
2	Bruce Richards	m	White	business	Math
3	Cathy Hammerberg	f	White	special ed	Math
4	Coretta Hoffman	f	White	teacher	Math
5	Doug McLean	m	White	business	Math
6	Ed Pina	m	Hispanic	business	Math
7	Esteban Delgadillo	m	Hispanic	teacher	Math
8	Janis Wignall	f	White	business	Math
9	Jennifer Vranek	f	White	business	Math
10	Jewel Brumley	f	American Indian	higher ed	Math
11	Karen Mulkey	f	White	teacher	Math
12	Kaye Wood	f	White	parent	Math
13	Leslie Bright	f	White	teacher	Math
14	Mike Stromme	m	White	leadership	Math
15	Phil Dommes	m	White	leadership	Math
16	Scott Campbell	m	White	teacher	Math
17	Shelley Redinger	f	White	higher ed	Math
18	Susan Santucci	f	White	teacher	Math
19	Therese Allin	f	White	teacher	Math
20	Wendy Wilsey (Mandere)	f	White	teacher	Math
21	John Freal	m	White	teacher	Math

Standard Setting Committee -- 10th Grade Reading					
	NAME	GENDER	ETHNICITY	GROUP	SUBJECT
1	Anne Hayman	f	White	teacher	Reading
2	Annie Foster	f	White	teacher	Reading
3	Barbara Hill	f	White	parent	Reading
4	Beth Shipe	f	White	teacher	Reading
5	Cheryl Patton	f	White	teacher	Reading
6	Diana Bledsoe	f	White	manager	Reading
7	Jane Taylor	f	White	business	Reading
8	Jeff Dunn	m	White	teacher	Reading
9	Julie Gaffney	f	White	parent	Reading
10	Karen Gozart	f	White	teacher	Reading
11	Kathleen Rice	f	White	specialist	Reading
12	Linda Clifton	f	White	business	Reading
13	Mindy Meyer	f	White	teacher	Reading
14	Patricia Edmondson	f	White	teacher	Reading
15	Reed Richardson	m	White	teacher	Reading
16	Susan Howard	f	White	teacher	Reading
17	Tami Nesting	f	White	teacher	Reading
18	Rea Phillips	f	White	higher ed	Reading
19	Diana Avalos	f	Hispanic	manager	Reading
20	Lori Eller	f	White	teacher	Reading
21	Jennifer Kelly	f	White	teacher	Reading
22	Cheryl Fortin	f	White	teacher	Reading
23	Yvonne VanWinkle	f	White	teacher	Reading
24	Jim Rigney	m	Hispanic	teacher	Reading
25	Justina Johnson	f	African American	parent	Reading

Standard Setting Committee -- 10th Grade Writing					
	NAME	GENDER	ETHNICITY	GROUP	SUBJECT
1	Marty Froelich	f	White	teacher	Writing
2	Bobby Cummings	f	African American	higher ed	Writing
3	Kathy McGuinness	f	White	teacher	Writing
4	Jennifer Brotherton	f	White	teacher	Writing
5	Nikki Mackey	f	White	parent	Writing
6	Marcia Tomlin	f	White	teacher	Writing
7	Greg Heath	m	White	business	Writing
8	Jeri Giachetti	f	White	teacher	Writing
9	Darla Keatley	f	White	teacher	Writing
10	Bambi Veh	f	White	specialist	Writing
11	Barbara Ballard	f	White	higher ed	Writing
12	Christy Chrisman	f	White	teacher	Writing
13	Cody Walke	f	White	teacher	Writing
14	Patricia Edmondson	f	White	teacher	Writing
15	Sheelah Ridgway	f	White	teacher	Writing
16	Kathy Shoop	f	White	specialist	Writing
17	Kevin Lavery	m	White	business	Writing
18	Susan Stone	f	White	teacher	Writing
19	Becky Bailey	f	White	teacher	Writing
20	Jennifer Young	f	White	teacher	Writing
21	Denise Snow	f	White	teacher	Writing
22	Lynda Nelsen	f	White	teacher	Writing
23	Beth Shipe	f	White	teacher	Writing
24	Gerald Turner	m	White	teacher	Writing
25	Pam Carter	f	African American	higher ed	Writing
26	Sarah Applegate	f	White	teacher	Writing

Standard Setting Committee – 7th Grade Mathematics					
	NAME	GENDER	ETHNICITY	GROUP	SUBJECT
1	Damon Schafte	m	White	title I	Math
2	Jay Jenkins	m	White	teacher	Math
3	Jennifer Shaw	f	White	leadership	Math
4	Julie Peck	f	White	higher ed	Math
5	Laurel Carpino	f	White	teacher	Math
6	Lisa Pierce	f	White	teacher	Math
7	Lisa Satterfield	f	White	gifted	Math
8	Margaret Reeves	f	White	teacher	Math
9	Patrick Paris	m	White	teacher	Math
10	Rachel Brewer	f	White	teacher	Math
11	Rita Chaudhuri	f	East Indian	teacher	Math
12	Rudy Edwards	m	African American	business	Math
13	Natalya Aoki	f	Asian/Pac. Is.	student	Math
14	Andy Coons	m	White	teacher	Math
15	Phil Dommes	m	White	manager/specialist	Math
16	Jewel Brumley	f	Am. Indian	higher ed	Math

Standard Setting Committee – 7th Grade Reading					
	NAME	GENDER	ETHNICITY	GROUP	SUBJECT
1	Bonnie Fulton	f	White	teacher	Reading
2	Dawn Ellis	f	White	teacher	Reading
3	Debra Ritchhart	f	White	teacher	Reading
4	Elaine Besett	f	White	parent	Reading
5	Jeanette Erickson	f	White	parent	Reading
6	Jill Vrablick	f	White	teacher	Reading
7	Karen Pell	f	White	teacher	Reading
8	Ken Renner-Singer	m	White	teacher	Reading
9	Lisa Cadero-Smith	f	White	principal	Reading
10	Lola Bailey	f	African American	teacher	Reading
11	Mariann Yielding	f	White	teacher	Reading
12	Marykate Grant	f	White	teacher	Reading
13	Maureen Siera	f	White	higher ed	Reading
14	Pam Carter	f	African American	higher ed	Reading
15	Daniel Lysne	m	White	teacher	Reading
16	Tami Szerlip	f	White	business	Reading
17	Ruth Knighten	f	African American	teacher	Reading

Standard Setting Committee – 7th Grade Writing					
	NAME	GENDER	ETHNICITY	GROUP	SUBJECT
1	Sharon Schilperoort	f	White	higher ed	Writing
2	Rita Wriglesworth-Meldrum	f	White	teacher	Writing
3	Pam Forbush	f	White	specialist	Writing
4	Christine Fuller	f	White	teacher	Writing
5	Margaret Angell	f	White	teacher	Writing
6	Becky Wilber	f	White	higher ed	Writing
7	Lisa McKeen	f	White	teacher	Writing
8	Anne Beitlers	f	White	teacher	Writing
9	Lydia Fesler	f	White	specialist	Writing
10	Estella Cordes	f	White	teacher	Writing
11	Deborah Spencer-Grant	f	African American	teacher	Writing
12	Karen McElliott	f	White	teacher	Writing
13	Darci Brewer	f	White	teacher	Writing
14	Maureen Lewis	f	White	teacher	Writing
15	April Yantis	f	White	teacher	Writing
16	Marilyn Meyer	f	White	ed specialist	Writing
17	Mindy Barry	f	White	teacher	Writing
18	Shirley Grant	f		teacher	Writing

Standard Setting Committee -- 4th Grade Mathematics					
	NAME	GENDER	ETHNICITY	GROUP	SUBJECT
1	Alan Bennett	m	White	title I	Math
2	Carol Hernandez	f	White	teacher	Math
3	Cynthia Thomas	f	White	higher ed	Math
4	David Cresap	m	White	teacher	Math
5	Diane Everson	f	White	teacher	Math
6	Gene Sementi	m	American Indian	leadership	Math
7	Gloria Williamson	f	White	teacher	Math
8	Jane Wilson	f	White	teacher	Math
9	Julie Russell	f	White	parent	Math
10	Kandice Hansen	f	White	teacher	Math
11	Katherine Venneri	f	White	gifted	Math
12	Terrie Geaudreau	f	White	title I	Math
13	Diane Brewer	f	American Indian	teacher	Math
14	Dorothy Woods	f	African American	ed specialist	Math

Standard Setting Committee -- 4th Grade Reading					
	NAME	GENDER	ETHNICITY	GROUP	SUBJECT
1	Cindy Vernon	f	White	parent	Reading
2	Elizabeth Urmenita	f	Asian/Pacific Islander	teacher	Reading
3	Jan Mayes	f	White	principal	Reading
4	Leah Carroll	f	White	teacher	Reading
5	Linda Murphy	f	White	teacher	Reading
6	Liz Knox	f	White	parent	Reading
7	Louanne Decker	f	White	principal	Reading
8	Lynn Emerson	f	White	teacher	Reading
9	Mike Meade	m	White	teacher	Reading
10	Nancy Withycombe	f	White	principal	Reading
11	Patty Schmella	f	White	manager/specialist	Reading
12	Sarah Bradley	f	White	principal	Reading
13	Janelle May	f	White	title I	Reading
14	Linda Clay	f	White	higher ed/principal	Reading
15	Karen Ferguson	f	White	manager/specialist	Reading
16	Marcie Von Beck	f	Asian/Pacific Islander	higher ed/business	Reading
17	Nadia Coughran	f	multi-racial	teacher	Reading
18	Aaron Wilkins	m	African American	teacher	Reading

Standard Setting Committee – 4th Grade Writing					
	NAME	GENDER	ETHNICITY	GROUP	SUBJECT
1	Dee Brown	f	White	teacher	Writing
2	Liz Hubbard	f	White	teacher	Writing
3	Gretchen Hannafious	f	White	parent	Writing
4	Brenda King	f	White	teacher	Writing
5	Kim Vogel-Wilson	f	White	teacher	Writing
6	Michelle Hornof	f	White	higher ed	Writing
7	Nick Hedman	m	White	teacher	Writing
8	Susan Johnson	f	White	teacher	Writing
9	Kelly Jacobsen	f	White	teacher	Writing
10	Joanne Zimny	f	White	parent	Writing
11	Anne Tsuneishi	f	Asian	principal	Writing
12	Suzanne Flynn	f	White	teacher	Writing
13	Diane Ganey	f	White	teacher	Writing
14	Amanda Smitkin	f	White	teacher	Writing
15	Harriett Williams	f	African American	parent	Writing
16	Jennifer Giliam	f	White	teacher	Writing

Standard Setting Committee – Grade 5 Science

#	Last	First	Area	Role	M/F	Articulation	Ethnicity
1	Acosta	Wendy	Spokane	Business	F		Hispanic
2	Adams-Oliver	Sylvia	Spokane	Higher Ed	F		White
3	Alberts	Dina	Everett	Teacher	F		White
4	Anderson	Stewart	East Wenatchee	Teacher	M	yes	White
5	Bay	Laura	Bremerton	Teacher	F		White
6	Blagsvelt	Don	Tacoma	Specialist	M		White
7	Blodgett	Debbie	Harrah	Teacher	F		American Indian
8	Boatman	Georgia	Kennewick	Teacher	F		White
9	Bonney	Joyce	Lynnwood	Teacher	F		White
10	Brumley	Jewel	Yakima	Specialist	F		American Indian
11	Cannard	Bruce	Canyon View	Principal	M		White
12	Cheney	Mark	Yakima	Specialist	M		White
13	Crabtree	Karolyn	Meridian	Parent	F		White
14	Delgadillo	Georgi	East Valley	TOSA	F		White
15	Fowler	Kim	Richland	Business	F		White
16	Harjo	Martha	Centralia	Teacher	F		White
17	Hopoi	Bev	Spokane	Teacher	F	yes	White
18	Imo	Nnenna	Stewart	Teacher	F	yes	Black/African American
19	Jones	Elaine	Yakima	Teacher	F		White
20	Kennedy	Anne	Vancouver	Director	F	yes	White
21	Leifer	Rosemary	Sierra Heights	Teacher	F	yes	White
22	Lindquist	Christy	Bellevue	Teacher	F		White
23	Moore	Mary	Richland	Teacher	F		White
24	Mynar	Terry	Mattawa	Teacher	F		White
25	Nawar	Joseph	Kent	Parent	M		White
26	Packard	Ric	Oak Harbor	Principal	M		White
27	Smith	Arleen	Yakima	Teacher	F		Asian/Pacific Islander
28	Teppner	Brian	Sierra Heights	Teacher	M		White
29	Waterman	Howard	Spokane	Higher Ed	M		American Indian
30	Wisdom	Charles		Business	M		White

Racial/Ethnic, Gender and Affiliation Composition of Committees

Grade 10 Mathematics (21)	81% White	62% Women
	10% Hispanic	38% Men
	5% Native American	
	5% African-American	62% Educators
	0% Asian/Pacific Islander	38% Non-educators
Grade 10 Reading (25)	88% White	88% Women
	8% Hispanic	12 % Men
	4% African-American	
	0% Asian/Pacific Islander	68% Educators
	0% Native American	32% Non-educators
Grade 10 Writing (26)	92% White	88% Women
	8% African-American	12% Men
	0% Asian/Pacific Islander	
	0% Hispanic	77% Educators
	0% Native American	23% Non-educators
Grade 7 Mathematics (16)	75% White	62% Women
	13% Asian/Pacific Islander	38% Men
	6% African-American	
	6% Native American	75% Educators
	0% Hispanic	25% Non-educators
Grade 7 Reading (17)	82% White	88% Women
	18% African-American	12% Men
	0% Asian/Pacific Islander	
	0% Hispanic	71% Educators
	0% Native American	29% Non-educators
Grade 7 Writing (18)	89% White	100% Women
	6% African-American	0% Men
	6% unknown	
	0% Asian/Pacific Islander	89% Educators
	0% Native American	11% Non-educators
Grade 4 Mathematics (14)	79% White	79% Women
	14% Native American	21% Men
	7% African-American	
	0% Asian/Pacific Islander	86% Educators
	0% Hispanic	14% Non-educators

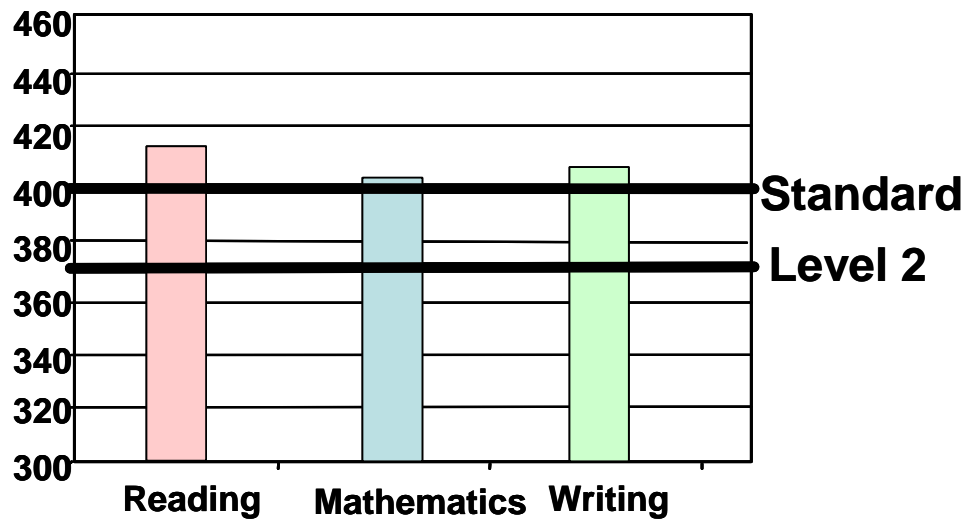
Grade 4 Reading (18)	78% White	89% Women
	11% Asian/Pacific Islander	11% Men
	6% African-American	
	6% Multi-Racial	78% Educators
	0% Hispanic	22% Non-educators
	0% Native American	
Grade 4 Writing (16)	88% White	94% Women
	6% Asian/Pacific Islander	6% Men
	6% African-American	
	0% Hispanic	75% Educators
	0% Native American	25% Non-educators
Grade 5 Science (30)	80% White	70% Women
	10% Native American	30% Men
	3% African-American	
	3% Asian/Pacific Islander	77% Educators
	3% Hispanic	23% Non-educators

Appendix B

This appendix depicts the 10 principle scoring models for the Certificate of Academic Achievement identified by OSPI. The four models which received the primary consideration from the spring through the conclusion of deliberations in November are marked with an asterisk. The hypothetical student scores depicted on each graph represent a result that would earn a certificate under that scoring model.

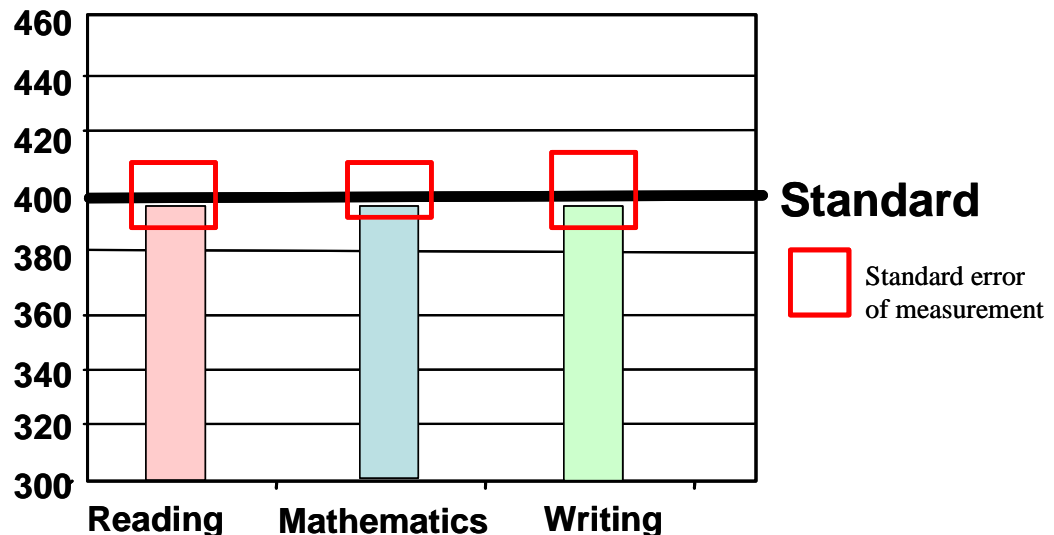
Model 1*

Student scores at least 400 on all 3 tests



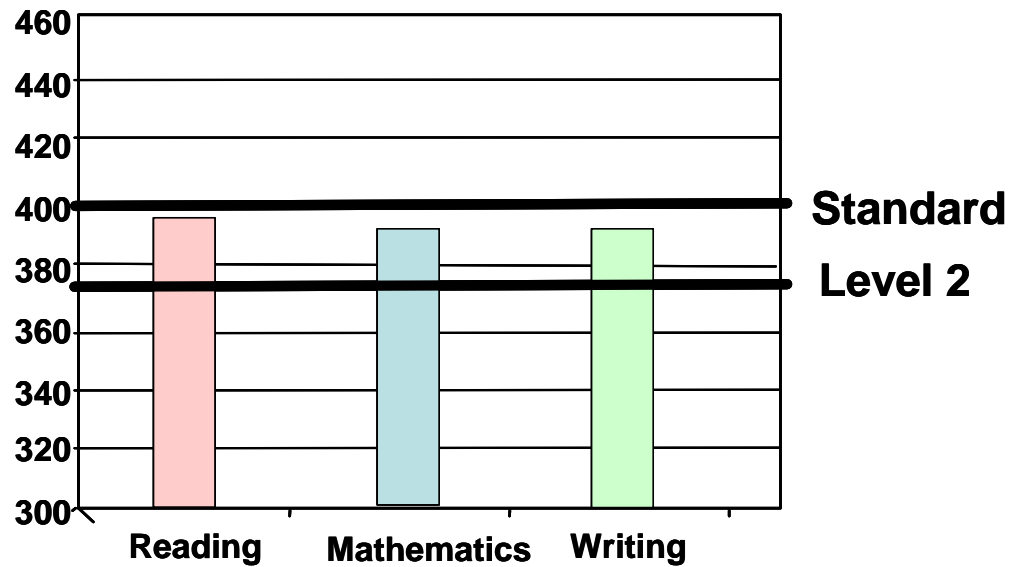
Model 2

Student scores at least 390 on all 3 tests
(within approximately one standard error of measurement of 400)



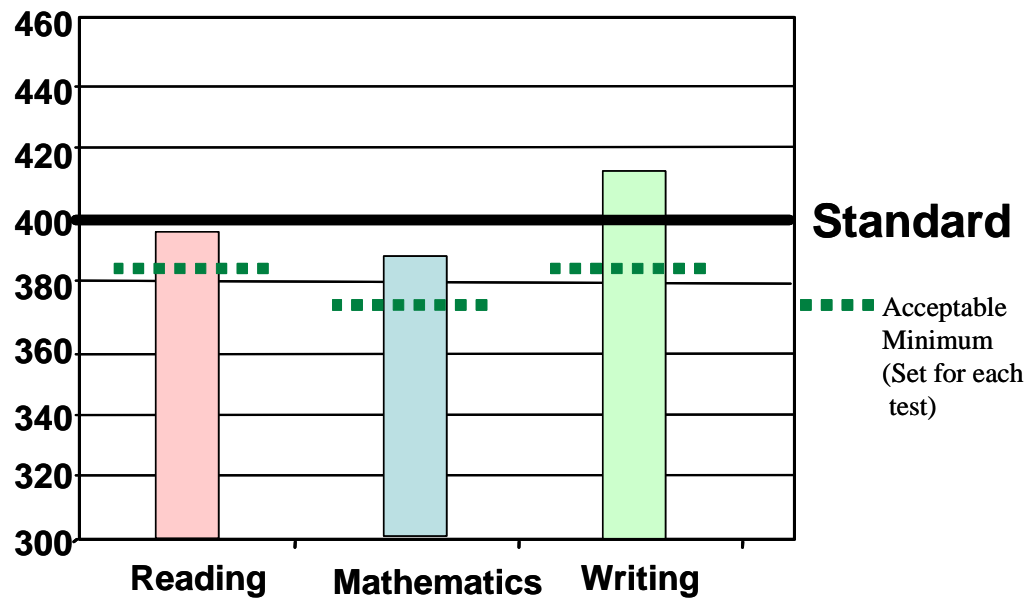
Model 3*

Student scores at least 375 on all 3 tests



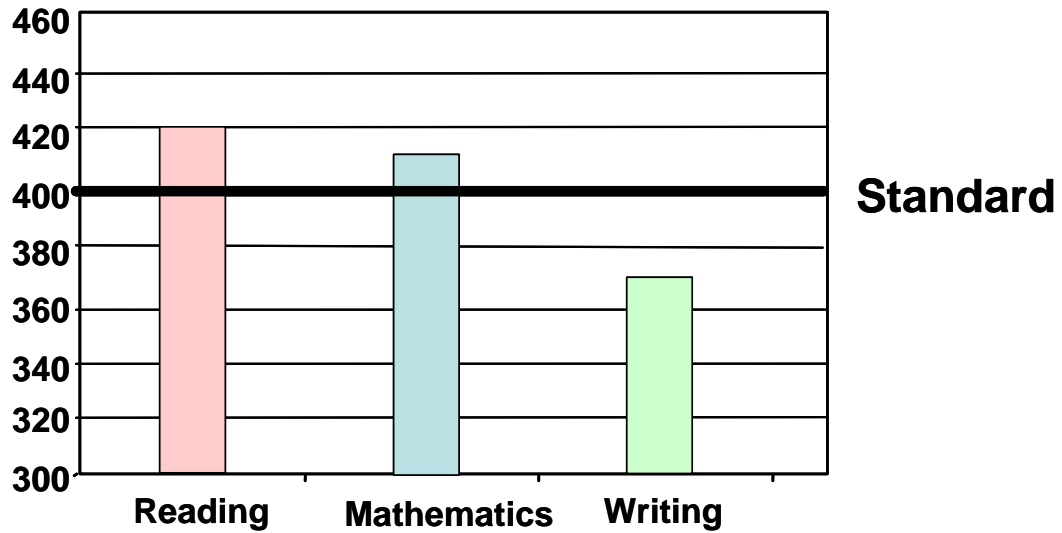
Model 4

Student scores at a yet-to-be-determined minimum



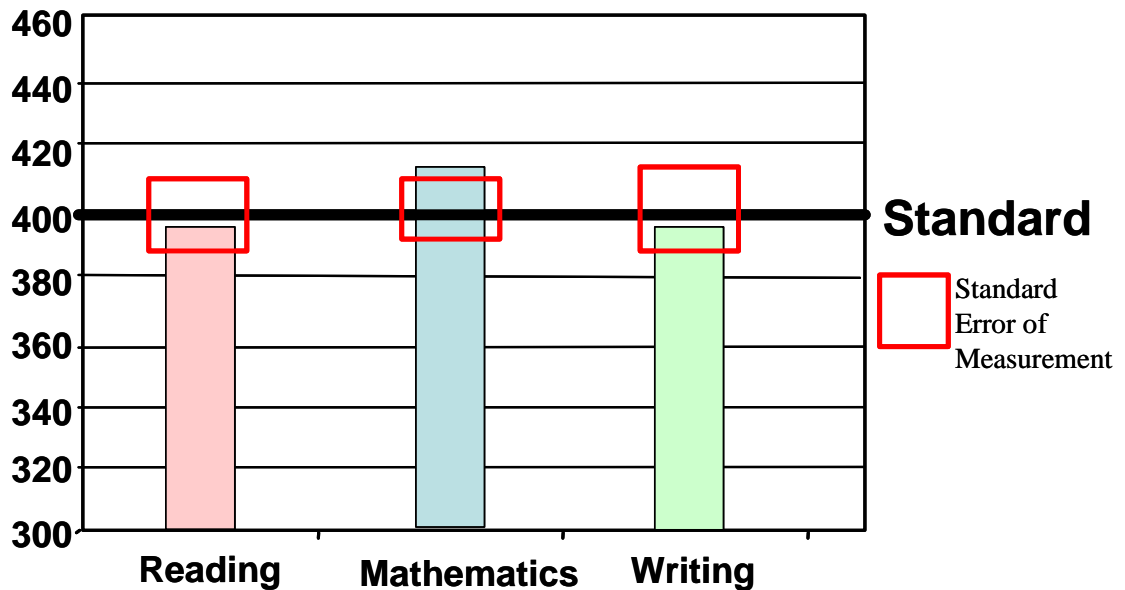
Model 5

Student scores at least 400 on average across 3 tests



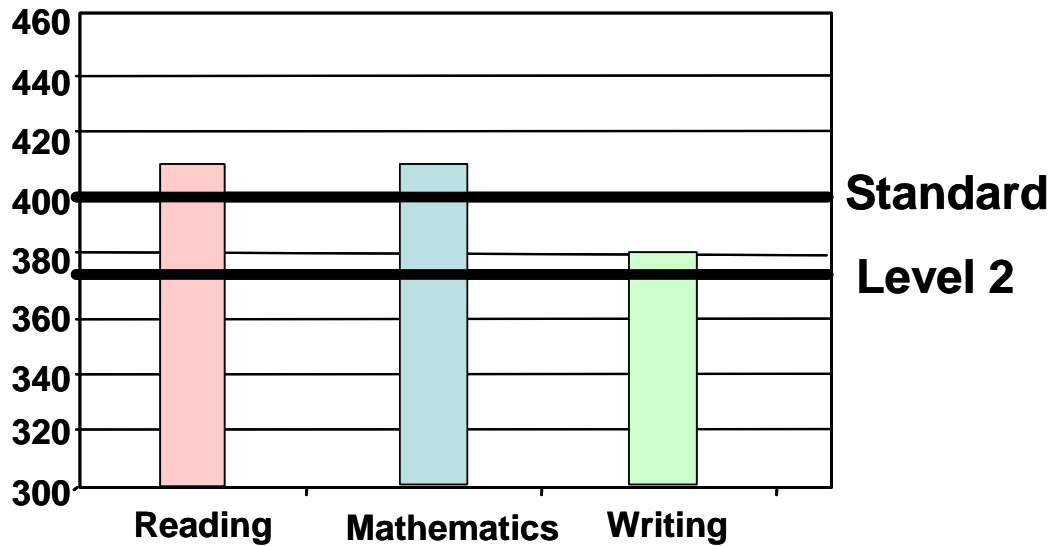
Model 6

Student scores at least 400 on average across 3 tests AND no score falls below 390 (that is, all scores must be within approximately one standard error of measurement of 400)



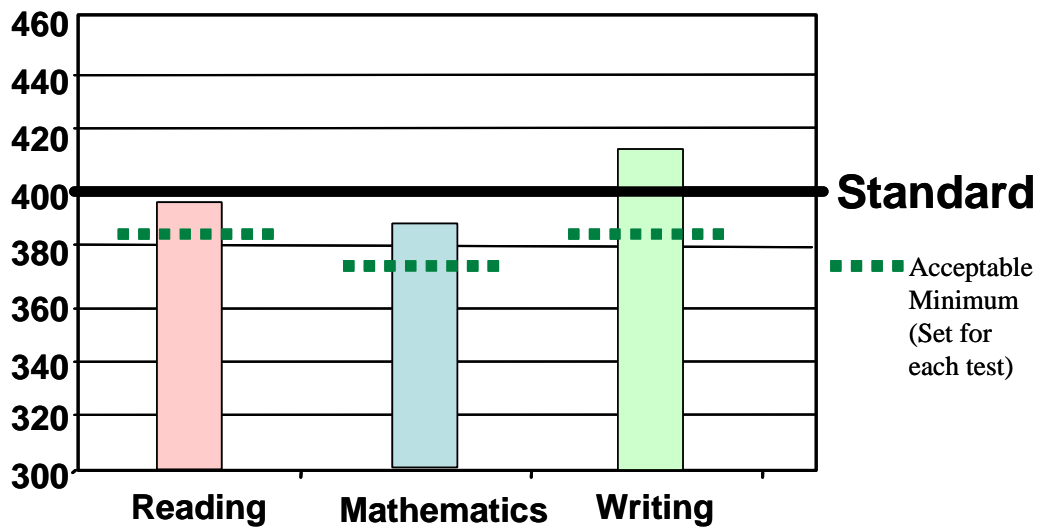
Model 7

Student scores at least 400 on average across 3 tests AND
no score falls below 375



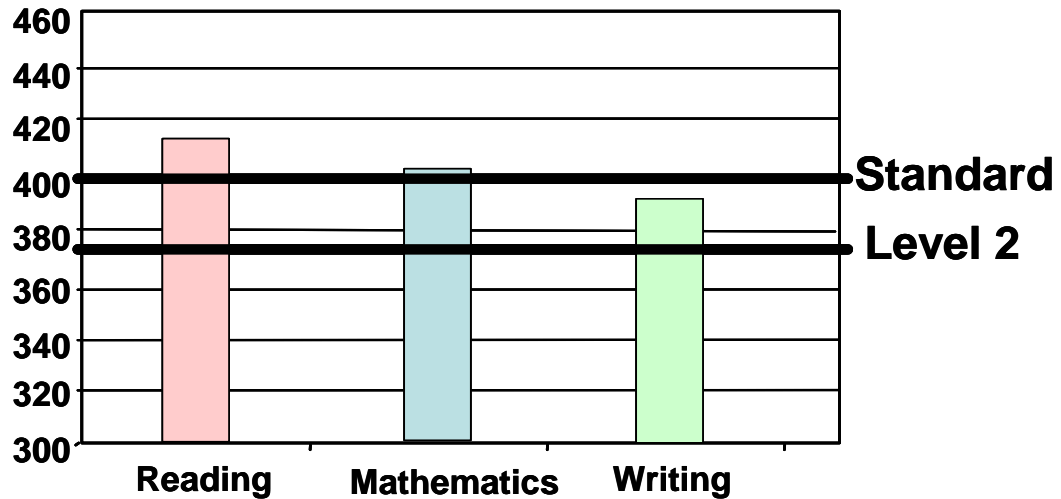
Model 8

Student scores at least 400 on average across 3 tests AND no score
falls below a yet-to-be-determined minimum



Model 9*

Student scores at least 400 on 2 tests;
The remaining test score can be as low as 375



Model 10*

Student scores at least 400 on 1 test;
Scores on the remaining 2 tests can be as low as 375

